

Appl. No.: 10/077,927
Docket No.: 1248-0578P
Reply to final Office Action of April 1, 2004

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A display module, comprising:
a display panel provided with external connection terminals; and

a flexible wire board having a wire pattern on a base material, terminals of the wire pattern of the flexible wire board and the external connection terminals of the display panel being bonded using an anisotropic conductive adhesive, the flexible wire board having an insulating protective layer for protecting the wire pattern,

wherein the anisotropic conductive adhesive is extended to protrude from the display panel, and

wherein the insulating protective layer of the flexible wire board is extended inside the display panel only through ~~two~~ both sides in a width direction of the flexible wire board while having the flexible wire board connected to the display panel.

2. (original) The display module set forth in Claim 1, wherein:

the flexible wire board is bonded onto a surface of the display panel at a periphery of an edge of the insulating protective layer closer to the terminals by using the anisotropic conductive adhesive.

3. (canceled).

4. (original) The display module set forth in Claim 1, wherein:

the base material of the flexible wire board has a thickness of not more than 40 μm , and the insulating protective layer has a thickness of not more than 40 μm , and the insulating protective layer is bonded onto the base material including the wire pattern by thermocompression bonding.

5. (original) The display module set forth in Claim 1, wherein:

a corner of the display panel, which faces an inner side of a bent portion of the flexible wire board in a bent state, is formed into a chamfered portion, and the insulating protective layer of the flexible wire board is extended inside the display panel beyond the chamfered portion.

6. (original) The display module set forth in Claim 1, wherein:

a corner of the display panel, which faces an inner side of a bent portion of the flexible wire board in a bent state, is formed into a chamfered portion, and the insulating protective layer of the flexible wire board is extended inside the chamfered portion while having the flexible wire board connected to the display panel.

7. (original) The display module set forth in Claim 6, wherein:

Appl. No.: 10/077,927
Docket No.: 1248-0578P
Reply to final Office Action of April 1, 2004

the flexible wire board is also bonded onto the chamfered portion of the display panel by using the anisotropic conductive adhesive.

8. (original) The display module set forth in Claim 6, wherein:

the flexible wire board is also bonded onto a side of the display panel by using the anisotropic conductive adhesive.

9. (original) The display module set forth in Claim 6, wherein:

the flexible wire board is bonded onto the chamfered portion and a side of the display panel by using the anisotropic conductive adhesive.

10. (canceled).

11. (currently amended) A flexible wire board, comprising:

a base material;

a wire pattern; and

an insulating protective layer for protecting the wire pattern on the base material, terminals of the wire pattern being connected to external connection terminals of a display panel by using an anisotropic conductive adhesive,

wherein the anisotropic conductive adhesive is extended to protrude from the display panel, and

wherein the insulating protective layer is extended toward the terminals of the wire pattern so that it extends inside

the display panel only through ~~two~~ both sides in a width direction of the flexible wire board while having the flexible wire board connected to the display panel.

12. (currently amended) A method for connecting a flexible wire board, comprising:

providing a flexible wire board including a base material, a wire pattern and an insulating protective layer for protecting the wire pattern on the base material;

connecting terminals of the wire pattern to external connection terminals outside a display panel by using an anisotropic conductive adhesive,

wherein the anisotropic conductive adhesive is extended to protrude from the display panel, and

wherein the insulating protective layer is extended inside the display panel only through ~~two~~ both sides in a width direction of the flexible wire board while having the flexible wire board connected to the display panel.

13. (canceled).

14. (original) The flexible wire board connecting method set forth in Claim 12, including the step of:

bonding a side of the display panel and the flexible wire board via the anisotropic conductive adhesive in between by thermocompression bonding.

Reply to final Office Action of April 1, 2004

15. (original) The flexible wire board connecting method set forth in Claim 12, wherein:

the anisotropic conductive adhesive is extended to protrude from the display panel, and

the method including the step of:

bonding a side of the display panel and the flexible wire board via the anisotropic conductive adhesive in between by thermocompression bonding.

16. (original) The flexible wire board connecting method as set forth in Claim 14, wherein:

said step is taken following the step of bonding external connection terminals of the display panel and the terminals of the flexible wire board via the anisotropic conductive adhesive in between by thermocompression bonding.

17. (currently amended) A display module, comprising:

a display panel provided with external connection terminals and a flexible wire board having a wire pattern on a base material, terminals of the wire pattern of the flexible wire board and the external connection terminals of the display panel being bonded using an anisotropic conductive adhesive, the flexible wire board having an insulating protective layer for protecting the wire pattern,

wherein:

the anisotropic conductive adhesive is extended to protrude from the display panel;

the flexible wire board is a COF; and

Appl. No.: 10/077,927

Docket No.: 1248-0578P

Reply to final Office Action of April 1, 2004

the insulating protective layer of the flexible wire board is extended inside the display panel while having the flexible wire board connected to the display panel.

18. (currently amended) A display module which includes a display provided with external connection terminals and a flexible wire board having a wire pattern on a base material, terminals of the wire pattern of the flexible wire board and the external connection terminals of the display panel being bonded using an anisotropic conductive adhesive, the flexible wire board having an insulating protective layer for protecting the wire pattern,

wherein:

the anisotropic conductive adhesive is extended to protrude from the display panel, and

at least a part of an end portion of the insulating protective layer of the flexible wire board is extended inside the display panel while having the flexible wire board connected to the display panel, the end portion being that of an external connection terminal side.